



KARO ECHO Newsletter

KARO ECHO

Serving the communities
of El Cerrito and
Kensington, California

Web: www.karoecho.net

Facebook:

[KARO ECHO facebook](#)

Email: info@karoecho.net

Important Frequencies

KE Primary: 146.415 MHz
Weekly Net, Thurs. 1900

KE Secondary: 146.475 MHz

4Cs Repeater: 145.110 MHz
(TX down 600 with PL 82.5)

Monthly Meetings

In-person meetings

2nd Monday of each month
7:00 pm

(online via Zoom also)

Kensington Comm. Center,
59 Arlington Blvd,
Kensington, CA

The next meetings are:

Aug 8th, 2022

Sept 12th, 2022

Meeting minutes are on
[the website](#) in the past
events page.

What's New

KARO ECHO Monthly Meeting, Aug 8th, 1900 — Hybrid In-person or Zoom

The monthly KARO ECHO meeting will be **hybrid in-person and online** via Zoom, at 1900, Monday Aug 8th. The training portion will be an introduction to digital modes for emcomm messaging. [Full agenda link.](#)

Article about KARO ECHO in the El Cerrito Chamber of Commerce Newsletter

Following up on a contact made at the 4th of July event, KARO ECHO was invited to have [an article in the El Cerrito Chamber of Commerce Newsletter](#). The By-line (see page 5). Thanks to Martha K6ELO for writing and coordinating the submission of this article.

Inviting More KARO ECHO Operators to practice Digital Messaging

Voice messaging with paper forms will continue to be the primary focus of KARO ECHO training and practice. However, digital messaging offers many benefits (including speed and accuracy). After many months of digital experimentation with a small group of digital operators, KARO ECHO is ready to expand digital training and grow the pool of operators with these skills, focusing on FLdigi/FLmsg messaging using digital emcomm forms (see page 8 for more)

Field Day 2022 Final Log and Points Submission

The final contact log and points tally for Field Day 2022 was submitted to ARRL with 65 CW, 22 digital, 20 voice, and 42 GOTA voice contacts on HF bands. There were also 36 contacts on VHF/UHF, for a total of 185 contacts. The points totaled 1914 (see summary sheet on page 9). Both contacts and points were up from 2021 when we had 73 contacts and 1548 points. Contacts more than doubled! Great job everyone! [You can browse the photos of Field Day 2022 at this link.](#)

New El Cerrito-Kensington Fire Chief Starting in August

Chief Eric Saylors was selected as the next El Cerrito-Kensington Fire Chief, starting in August. Chief Saylors currently serves as an Assistant Fire Chief for the City of Sacramento Fire Department, where he has served since 1998. Chief Saylors is currently working on a Doctorate in Leadership and Organizational Change from the University of Southern California. He holds a Masters in Security Studies from the Naval Post Graduate School, as well as a Bachelors in Business Management from California State University, Sacramento.

LOCAL NETS**KARO ECHO Simplex Nets**

146.415 MHz (primary)

146.475 (secondary)

Voice net: Thursday, after the West Contra Costa RACES Net, but not before 1900 hours local time.

Digital net: Monday, 1900

West Contra County ACS/RACES Net

145.110 MHz repeater
(TX down 600 with PL 82.5)
Thursday: 1845 local time

Contra Costa County HF EmComm/RACES Net

3893 KHz. Thursday, 1835

American Red Cross of the Bay Area (ARCBA)

WW6BAY Repeater
443.975 MHz
TX +5 MHz, PL 100 Hz
Wednesday: 2000 local time

BOARD MEMBERS

President: Howdy KE6BEE
Vice-Pres: Frans KJ6IUV
Treasurer: Annette KJ6SWK
Secretary: Tom KN6BUY
Em. Coord: Howdy KE6BEE
Outreach/PR Manager:
Blake KN6CMP
Web-maestro: Rob K6RJM
Board member at large:
Hal KK6NDF
Net Manager and Newsletter
Editor: Howdy KE6BEE

What's New *(continued)***Neighborhood nets and Communication Hub Activities**

The first Wednesday of the month has a lot of radio activity in the area.

West county EmComm net out of Richmond at 11 am (starts after the Richmond siren test) FRS/GRMS simplex (on Ch.19, secondary Ch. 17), followed by a ham net on the [WA6KQB 440 repeater](#) with WA6DUR repeater as secondary (see WA6DUR freq. information below)

East Richmond Heights, ham operators check-in at 1845 on Walt's WA6DUR repeater 442.150 +5 offset and PL tone 107.2Hz.

EC4 (central El Cerrito Hills) CERT Net, Ch. 2 (462.5875), at 1845

EC9 (north El Cerrito Hills) CERT Net, Ch. 15 simplex (462.550), at 1900

East Richmond Heights, Ready-2-React Net, Ch. 7 (462.7125), at 1930

EC8 (north El Cerrito) CERT net, Ch.4 (462.6375), at 2000

Ken6 (SW Kensington) CERT net, on first Tuesdays, Ch. 6 (462.6875) at 1900

Richmond simulated EOC net, first Thursdays at 1030, on three simplex frequencies in this order: 147.450, 441.000, 223.400

Albany Radio Net, Wed. (weekly) 1900 on Ch.19 [Albany Radio groups.io](#)

[Coordination of neighborhood FRS/GMRS frequencies can be found here.](#)

Welcome New Hams

New El Cerrito licenses issued: 1, KN6VGZ

New Kensington licenses issued: none in past month

Action - Contribute to this Newsletter

Content for this newsletter is always welcome. We are seeking submissions for a new free classified section for selling/trading radio equipment/services. Anyone with events or other content suggestions please send them to the newsletter editor Howdy ke6bee@arrrl.net

Digital Net, Wed. 8/10, 1930

Because of the member meeting on Monday, the digital net will be on Wed. 7/13, at 1930 on 146.415. In addition to the weekly digital nets for practice and experimentation, Starting in Sept. there will be a monthly digital net focusing on regular FLdigi/FLmsg emcomm messaging practice for a wider group.

What's New *(continued)*

Radio Team KARO ECHO Hats

Thanks to Blake KN6CMP and Susan KN6CMR for organizing an order of KARO ECHO hats. They are safety yellow with reflective trim and embroidered lettering. They can be purchased from KARO ECHO for \$25. Contact Howdy KE6BEE for more information ke6bee@arrl.net.



FCC \$35 Amateur Application Fee Took Effect April 19, 2022

The \$35 application fee, effective on April 19, applies to new licenses, modification (upgrade and sequential call sign change), renewal, and vanity call sign applications. Administrative updates, such as a change of name, mailing or email address, are exempt from fees. [More here](#). GMRS is reduced from \$70 to \$35.

Online payments to KARO ECHO

It is now possible to pay KARO ECHO membership online through PayPal. No PayPal account is required. Use the [donate button on the KARO ECHO home](#) page, or under the heading "[Get Involved—Join](#)".

Your dues and donations are the source of funds for our ongoing costs of operation, as well as installing equipment we need to have in place for effective emergency operations. Currently, we are planning to install additional antennas and patch boxes in El Cerrito and Kensington to give easy outdoor access to high quality communication for operators deployed various public spaces.



Treasurer's Report

KARO-ECHO Treasurer's Report				
As of Aug 3, 2022				
	Credits	Debits	Bank	Notes
Balance Forward from 7/5/2022			\$1,588.07	
Since last report				
No transactions since 7/5/2022				
Balance 8/3/2022			\$1,588.07	
26 total paid members to date for 2022				

Activities

Weekly Net Control Rotation

Thanks go out to the volunteer stations who have been taking turns as Net Control Stations (NCS) each Thursday. This rotation has been working very well and everyone has been doing a great job. The regular NCS roster has 9 operators. Fill-ins are sometimes needed and we can always add another to permanent rotation. Please volunteer to give it a try. [Download the new Net Script for NCS operators.](#)

Below are the **new scheduled dates** for each operator next year. The [KARO ECHO google calendar](#) also has these assignments and can be found at the bottom of the events page. Add to your electronic calendar By pressing the "+GoogleCalendar" button in the lower right.

Net control is a skill that many operators should have and regularly practice. Please contact Howdy ke6bee@arrl.net if you are interested in taking a net control assignment.

Callsign	Name	Assigned Dates (skipped: Thanksgiving 11/25/2021, 11/24/2022)						
KE6BEE	Howdy Goudey	10/21/2021	12/30/2021	3/3/2022	5/5/2022	7/7/2022	9/8/2022	11/10/2022
KK6NDF	Hal Graboske	10/28/2021	1/6/2022	3/10/2022	5/12/2022	7/14/2022	9/15/2022	11/17/2022
KM6HBO	Jamuel Starkey	11/4/2021	1/13/2022	3/17/2022	5/19/2022	7/21/2022	9/22/2022	12/1/2022
KN6BUY	Tom Fattaruso	11/11/2021	1/20/2022	3/24/2022	5/26/2022	7/28/2022	9/29/2022	12/8/2022
K6RJM	Rob McNicholas	11/18/2021	1/27/2022	3/31/2022	6/2/2022	8/4/2022	10/6/2022	12/15/2022
KE6HCE	Armando Picciotto	12/2/2021	2/3/2022	4/7/2022	6/9/2022	8/11/2022	10/13/2022	12/22/2022
KJ6IUV	Frans Kuypers	12/9/2021	2/10/2022	4/14/2022	6/16/2022	8/18/2022	10/20/2022	12/29/2022
KN6CMR	Susan Yeaman	12/16/2021	2/17/2022	4/21/2022	6/23/2022	8/25/2022	10/27/2022	1/5/2023
KK6ZPM	Karen Fenton-Leong	12/23/2021	2/24/2022	4/28/2022	6/30/2022	9/1/2022	11/3/2022	1/12/2023

Thursday Net Training Exercises

Following the net check-ins every Thursday at 1900 on 146.415, KARO ECHO usually runs a training exercise to learn and practice skills that are important for successful disaster communications.

[A list of potential training exercises](#) is posted and maintained on the training page of the website.

[A log of our check-in counts can be found here.](#) Howdy KE6BEE typically updates this document in real time during the net, so you can check it against your log during or after the net.

For 2020: 1008 check-ins, avg. 21/week, high of 28, 72 unique callsigns

For 2021: 919 check-ins, avg. 19/week, high of 25, 54 unique callsigns

For 2022 (so far): 551 check-ins, avg. 18/week, high of 23, 43 unique callsigns

Thanks for your participation. Keep it up!

About KARO ECHO

KARO ECHO is the name of the Kensington Amateur Radio Operators and the El Cerrito Ham Operators mutual benefit association, an all-volunteer non-profit group of amateur radio operators providing auxiliary communications for the cities of Kensington and El Cerrito in the event of a disaster. KARO ECHO works with CERT (Community Emergency Response Teams) in Kensington and El Cerrito, but is not an official part of the CERT program.

Monthly in-person meetings of KARO ECHO are on the 2nd Monday of each month at 7:00 pm, in-person at the Kensington Community Center (KCC) as well as online using Zoom (hybrid meetings).

The next meetings are:

- ♦ Aug 8th, 2022
- ♦ Sept 12th, 2022

Yearly membership dues are \$30/year for individuals, \$40/year for a family membership. Payments can be given to the Treasurer at monthly meetings or mailed to the address below. Participation is welcome independent of paid membership, but only licensed amateur radio operators who are dues paying KARO ECHO members will be allowed to vote on KARO ECHO business. Dues cover our 510c3 registration, post office box, web page, station operating manuals and more. Your input on useful expenditures to aid emergency communications is welcome.

Mail to: KARO ECHO, PO Box 2025, 6324 Fairmont Ave, El Cerrito, CA 94530-3651

Please see our website for more information: www.karoecho.net

You can contact the KARO ECHO board by email: info@karoecho.net

KARO ECHO Facebook

The [KARO ECHO Group on Facebook](https://www.facebook.com/groups/1451216838315743/) has a lot of good information, more than is contained on our website. There is a whole wide world of emergency communications information at <https://www.facebook.com/groups/1451216838315743/> Check it out and be inspired of what we can do to help disaster victims in our community.

Weekly Training Net

The Karo-Echo Weekly Training Net meets every Thursday evening immediately after the West Co Co County RACES/ACS Net; but not before 1900 on 146.415 MHz Simplex. Our secondary frequency is 146.475 MHz simplex. Details at <https://www.karoecho.net/events>

Newsletter Content Wanted

Any input on content you'd like to propose for inclusion in the KARO ECHO newsletter can be sent to Howdy ke6bee@arrl.net We welcome all ideas for content including announcements, events, etc.

KARO ECHO Field Day Video

Thanks to Frans KJ6IUUV for taking video and editing a nice [movie of Field Day activities](#).

Outreach, Education and Licensing

Local and Online Ham License Classes and Exams

Many ham license classes and exams are offered locally or entirely online. See a [list of opportunities on the KARO ECHO website](#)

ARRL Learning Network Webinars

Visit the [ARRL Learning Network](#) (a members-only benefit) to register, check on upcoming webinars, and to view previously recorded sessions.

Recruiting Additional Communications Coordinators

Read the [Neighborhood District Radio Communications Coordinator \(DRCC\) plan](#) written by Don NI6A.

Training for Beginning Operators

Thanks to Jay KJ6WSS, Edward KM6UBY and Karen KK6ZPM for their May 23rd 2020 introductory radio class, with emphasis on the GMRS radio BTECH-V1. [A recording of the class and other resources are available here.](#)

Net Control Operator Training

Diane KK6RED, David KJ6AAT and Howdy KE6BEE taught an Apr 4th 2020 net control class for C8 the county wide CERT organization. There was a great reception to this class across the county and we inspired many groups to expand the scope of their net trainings. [The class recording is available here.](#)

EMCOMM related videos

See the CERT SET Youtube video link

<https://www.youtube.com/watch?v=66DdgGLn4c&list=PLROOaUIKdrEgSID1bQJZojW3PzfURoEY-&index=144&t=0s>

Post Camp Fire GMRS organization

https://www.youtube.com/watch?time_continue=220&v=aZiSC4sgKYw&feature=emb_logo

ELMERING

An online elmering forum can be accessed by emailing elmer@karoecho.net or browsing the associated google group. More in-depth elmering/mentoring is available by request.

In the meanwhile, please check out the plethora of useful information at <https://www.karoecho.net> website.

Encouragement to Monitor 146.415 and Explore Other Nets

It is always encouraged to monitor 146.415 (call out for others occasionally and make some casual contacts). There are a lot of other nets around the bay area that you can reach. Expand your radio horizons. See the [KARO ECHO Coordination page](#) for a listing of some other nets to explore. You can just listen at first, or program your radio (if a repeater is used) and try transmitting as a guest check-in to see if you can make contact.

KAROECHO.Net Website

Especially, check out the EVENTS Page (<https://www.karoecho.net/events>) and the WORKSTREAMS drop-down menu which will lead one to an extensive training page that provides online learning at your own pace. Everything from the very beginning to advanced EmComm operations is detailed. The RESOURCE page has many excellent outside links.

- ♦ This [new heading on the Events page](#) will be updated with recent additions to the website.
- ♦ If you are on Facebook, contribute to the KARO ECHO Facebook Group Page at <https://www.facebook.com/groups/1451216838315743/>
- ♦ If you haven't already filled out the **JOIN** form please do. Find it as a drop down menu under "Get Involved" See <https://www.karoecho.net/join>
- ♦ A [follow-through novice primer](#) has been put on the website for new hams once they have bought their radio and want to learn more.
- ♦ A [dual-band antenna primer](#) for new hams who want to graduate from the rubber-ducky world
- ♦ Note that the Tram 1480 gain dual band antenna is currently still available for \$51 (no tax and free shipping) on ebay or from Home Depot. That and an inexpensive speaker tripod is a dynamite combination for portable operation. This antenna is equivalent to the Diamond X-200a antenna which sells at HRO for \$125.00 before taxes and shipping.
- ♦ For newbies, please visit <https://www.karoecho.net/workstreams/training> and read the study materials. It is all there except for hands-on experience. Ask questions!
- ♦ Following the Thursday evening net check-in, there is often a training session and/or discussion.
- ♦ All recent KARO ECHO [Minutes will be found at our Past Events page](#) We are now including past Executive Board Minutes as well. [Newsletters are on the Documents Page](#).

If you desire to be removed from this email list, please email info@karoecho.net

Other Resources

"ALERTWildfire" camera links in our area:

[William Rust Summit cam](#)

[Wildcat Canyon cam](#)

[Vollmer Peak cam](#)

[Nichol Knob cam](#)

[View real-time data from any weather station in the state.](#)

[Zonehaven evacuation zone here by on this interactive map](#)

[Albany Radio Groups.io forum](#)

[Eastbay Resilience Groups.io forum](#)

[Marina Bay Neighbors and 1st Wed West county GMRS net](#)

To make it easy for amateurs to evaluate RF exposure, ARRL provides an [RF exposure calculator](#) on its [RF Exposure page](#).

Getting Started With Digital EmComm Messaging

We are not going to replace voice messaging with paper forms as the fundamental emergency communication skills that we practice, but digital communication over radio can offer significant benefits that are worth training, as well. While it relies upon the function of a bit more hardware, the speed and accuracy of digital messaging is very valuable. There are many types of digital communication over radio, but for the purposes of getting the most operators up to speed with digital messaging for emcomm purposes, the digital group that has been experimenting for many months, is recommending a focus on [FLdigi](#) and [FLmsg](#). Two programs that work together to pass emcomm form messages that are already familiar to operators. [A detailed installation guide for installing](#) on Windows 10 operating system is here. FLdigi/FLmsg can also be installed on MacOS, Linux, and Raspberry Pi.

Android Smartphone/Tablet App

Alternatively, instead of a Windows OS computer, there is an android app that will work on android smart phone and tablets. It is a single app capable of sending and receiving formatted message (instead of the combination of two programs, FLdigi and FLmsg). The [software and documentation for that option can be found here](#). You have to “sideload” this app as it does not appear in the Google Play app store. Once your download the .apk file to your device you can click on it as if to open/run it and the operating system will install it after asking you to confirm permissions for this type of install. For mobile applications this may be more convenient, however a keyboard may be highly useful (can add a small Bluetooth keyboard).

Wired Audio Interfaces and Faster Modes

While MT63-2000L is robust and can work with acoustic coupling (no wires between the computer and radio), a typical form message will take about 40 seconds to transmit with this modulation. This is considerably faster than voicing the same message and error checking assures perfect copy, even for a complicated message, but it is possible for digital messages to be passed even faster. 8PSK-1200F can send the same message in well under 10 seconds. Using a wired interface to transfer the audio signals between the computer and the radio is a cleaner, more reliable method that supports faster data transmission, like 8PSK. The PTT can also be automatically triggered by the computer, so you don’t have to manually hold PTT through the digital transmission.

There are many “soundcard” digital interface that can be used to connect your radio to FLdigi/FLmsg. A small, simple, low cost option is [Digirig, \\$50](#). Or, [Digilink Nano, \\$80](#). . Or, [Signalink](#) is also a very good product, but quite a bit more expensive at \$140. All of these options have pre-made audio cables available that will connect to popular radios, or KARO ECHO members can help you build a custom cable. There are also lower cost interface options than the those mentioned, if you are interested in a little more work assembling a custom project (KARO ECHO members are happy to help with this).



Field Day 2022 Contacts and Points

Call Used: **W6ECK** GOTA Station Call: **W6CUS** ARRL/RAC Section: **EB** Class: **3A**

PClub/Group Name: **KARO-ECHO**

Power Source(s): **Battery, Solar**

Power Multiplier: **2X**

Preliminary Total Score: 1,914

Bonus	Points	Status
100% emergency power	300	
Media publicity	100	Documented by FD2022localnewspapercalendar.jpg
Public location	100	
Public information table	100	Documented by FD2022infotable.jpg
W1AW Field Day message	100	Documented by ARRL FD Message 2022 - K6KPH Broad-
Natural power QSOs completed	100	Documented by IMG_1111.JPG
Site visit by invited elected official	100	
Educational activity	100	
Youth participation	40	
Safety officer	100	Documented by SafetyChecklistFD2022.jpg
Social media	100	
GOTA Station	80	
Entry submitted via web	50	
Total bonus points	1,370	

	CW	Digital	Phone	Total
Total QSOs	65	22	98	
Total Points	130	44	98	272

Claimed Score = (QSO points x power mult) = **544**

Band	CW	Digital	Phone
160m			
80m			
40m	4	6	
20m	60	15	20
15m	1		
10m		1	
6m			
2m			26
222			
432			10
Other			
Satellite			
GOTA			42
Total	65	22	98

KARO ECHO Classifieds

We are soliciting classified ads from KARO ECHO members, and friends, to facilitate gifting, swapping, selling radio gear and/or offering help/services such as loans of special equipment/tools, etc. Please send any content to the newsletter editor, Howdy ke6bee@arrl.net

Loaner radios/antennas/meters available for trial/testing, including:

HTs, larger mobile radios, gear for digital modes and mesh nodes, SWR/power meter

Contact: Howdy ke6bee@arrl.net

Available for free: B&K Precision 2120B oscilloscope - 20MHz bandwidth, dual trace, triggered sweep. Contact: Tom, KN6BUY, at tfat@sbcglobal.net
